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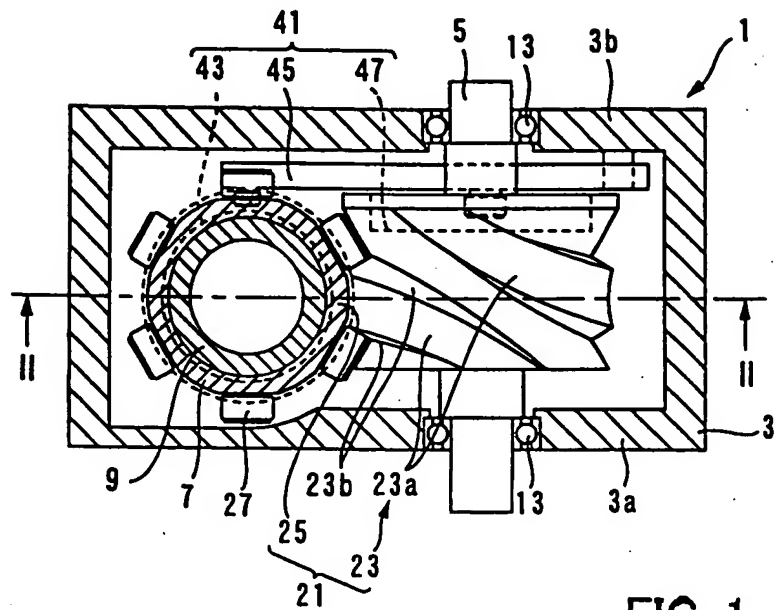


FIG. 1

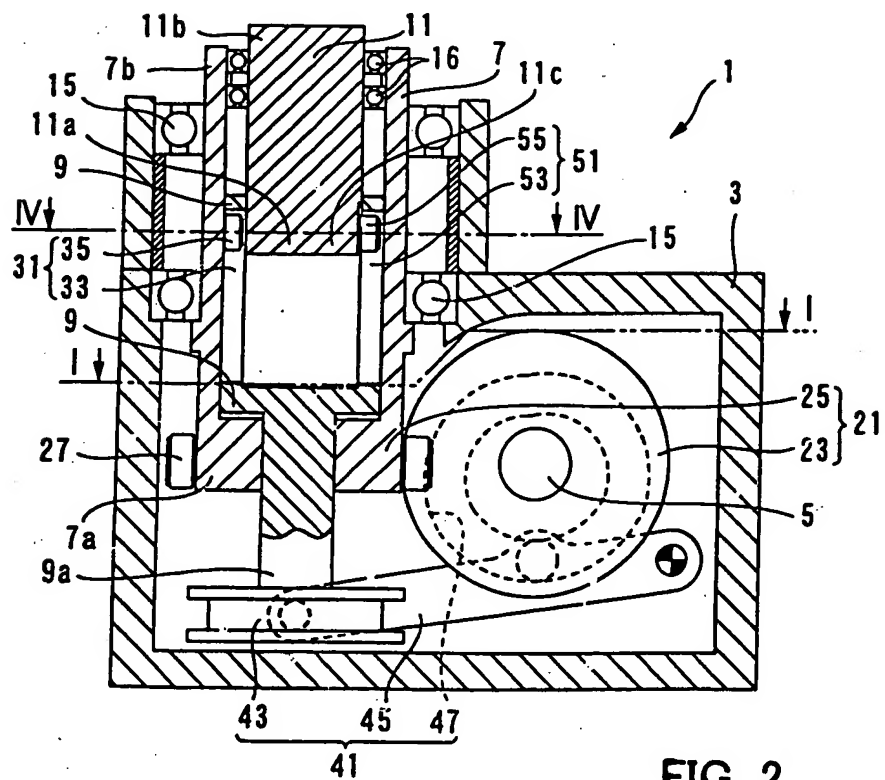


FIG. 2

FIG. 3.

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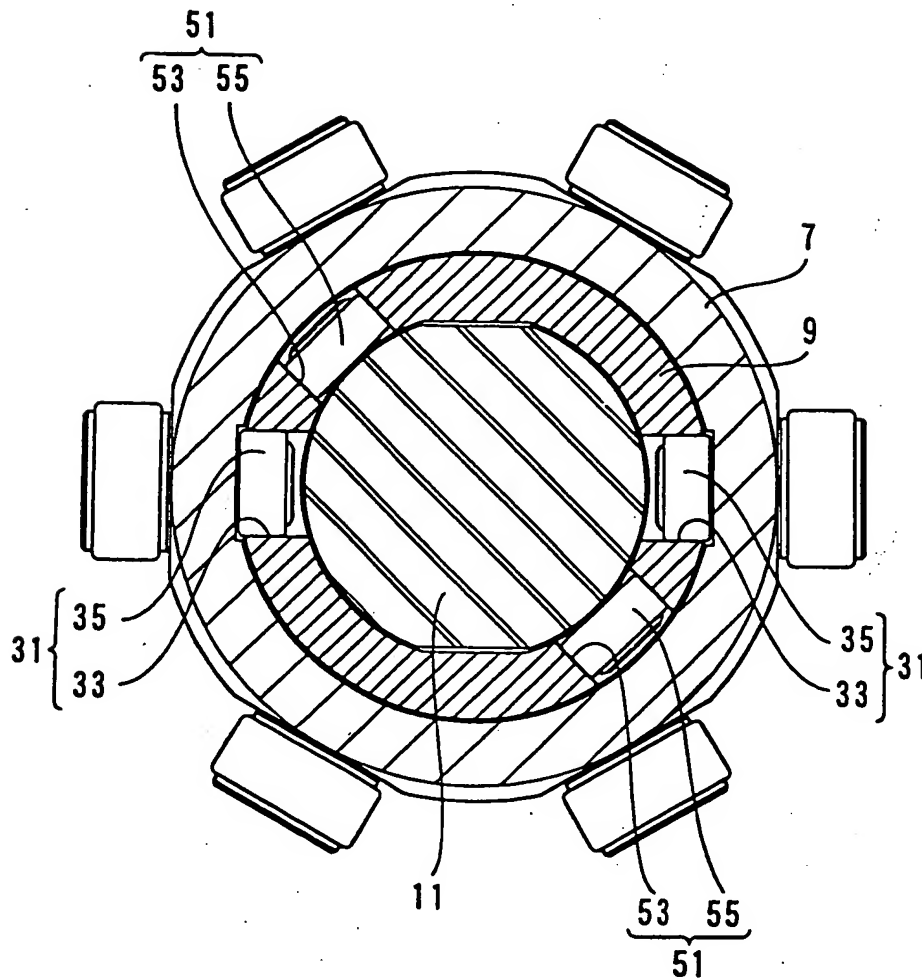


FIG. 4

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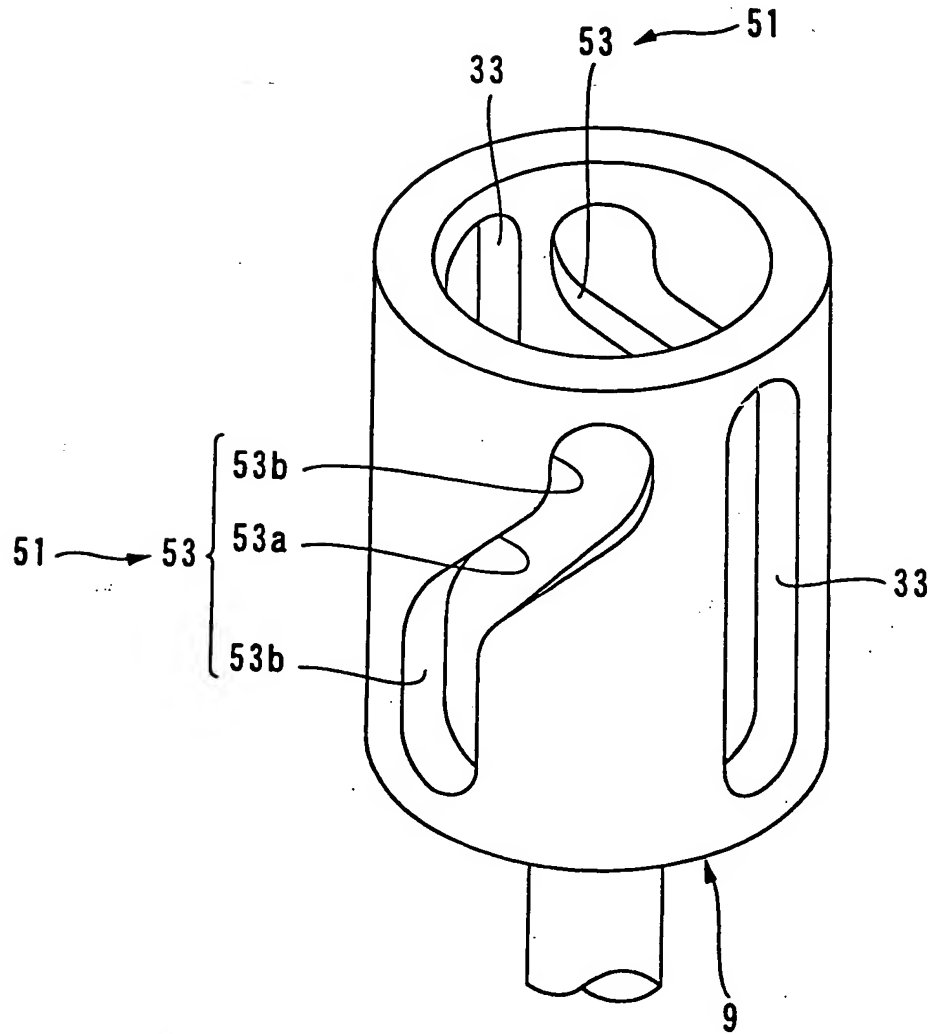
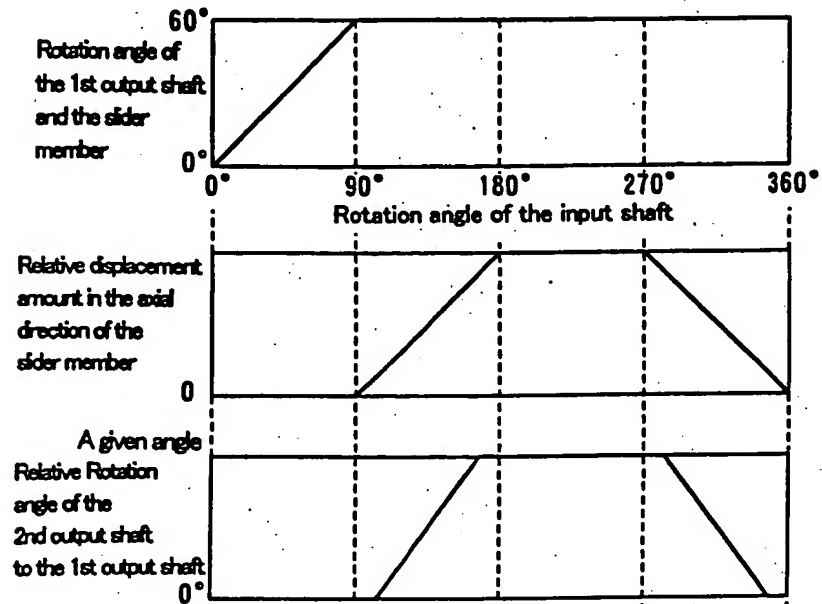


FIG. 5

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Timing Diagrams



Operation Diagrams

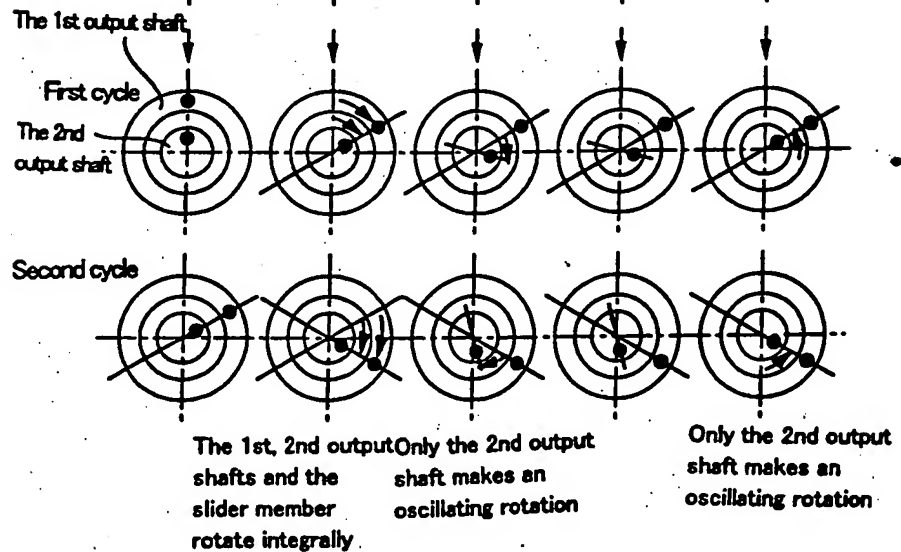


FIG. 6

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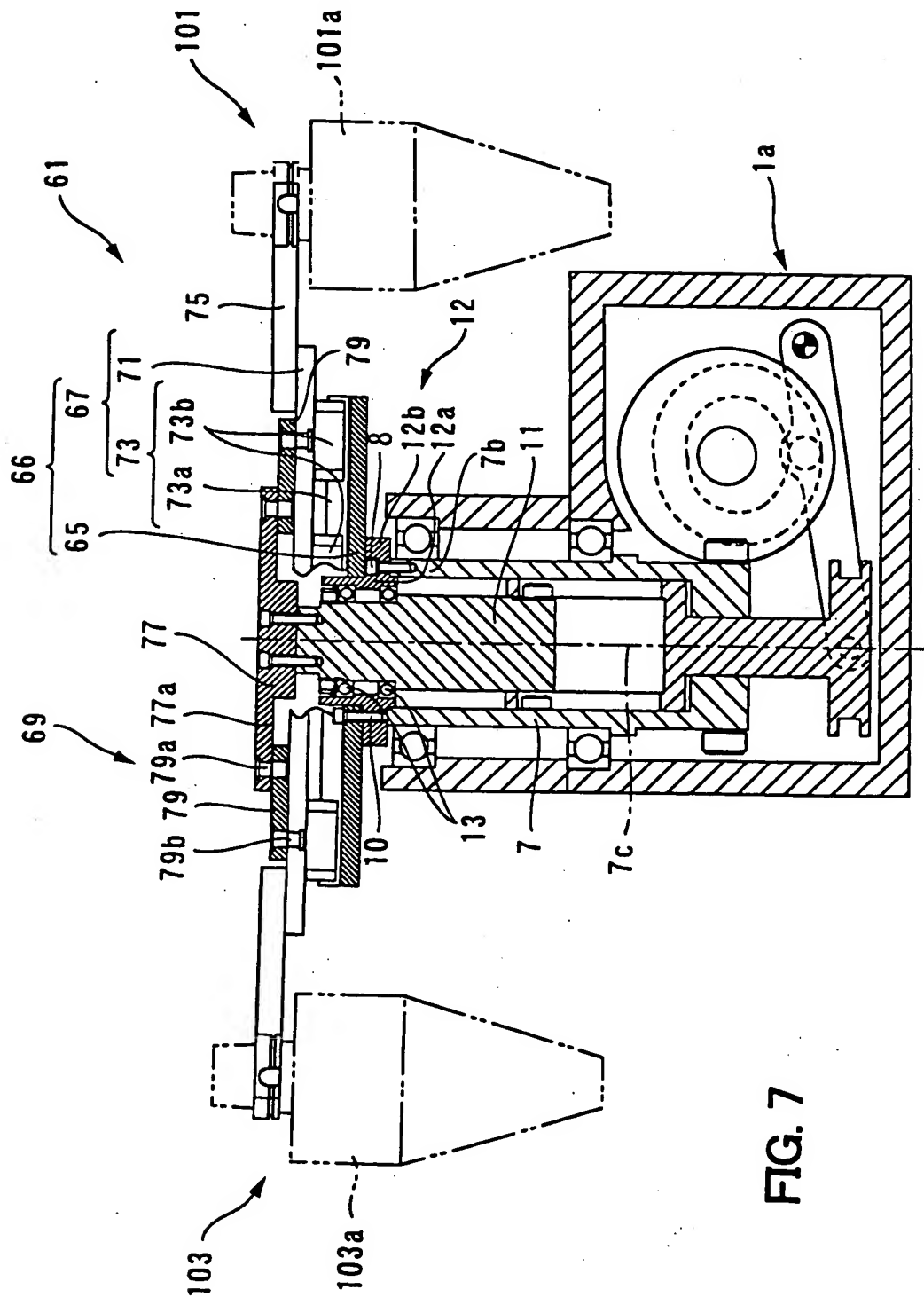
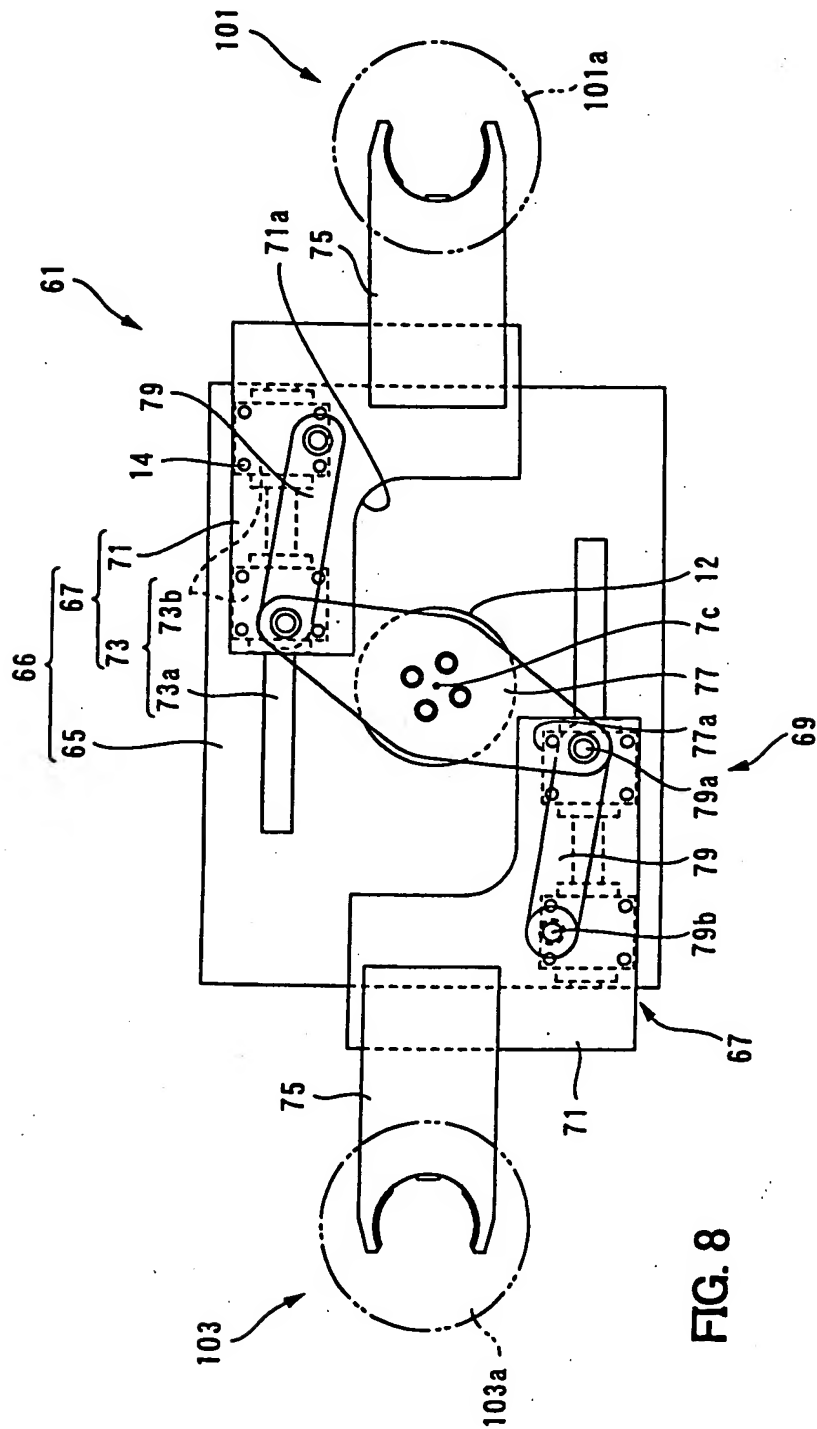
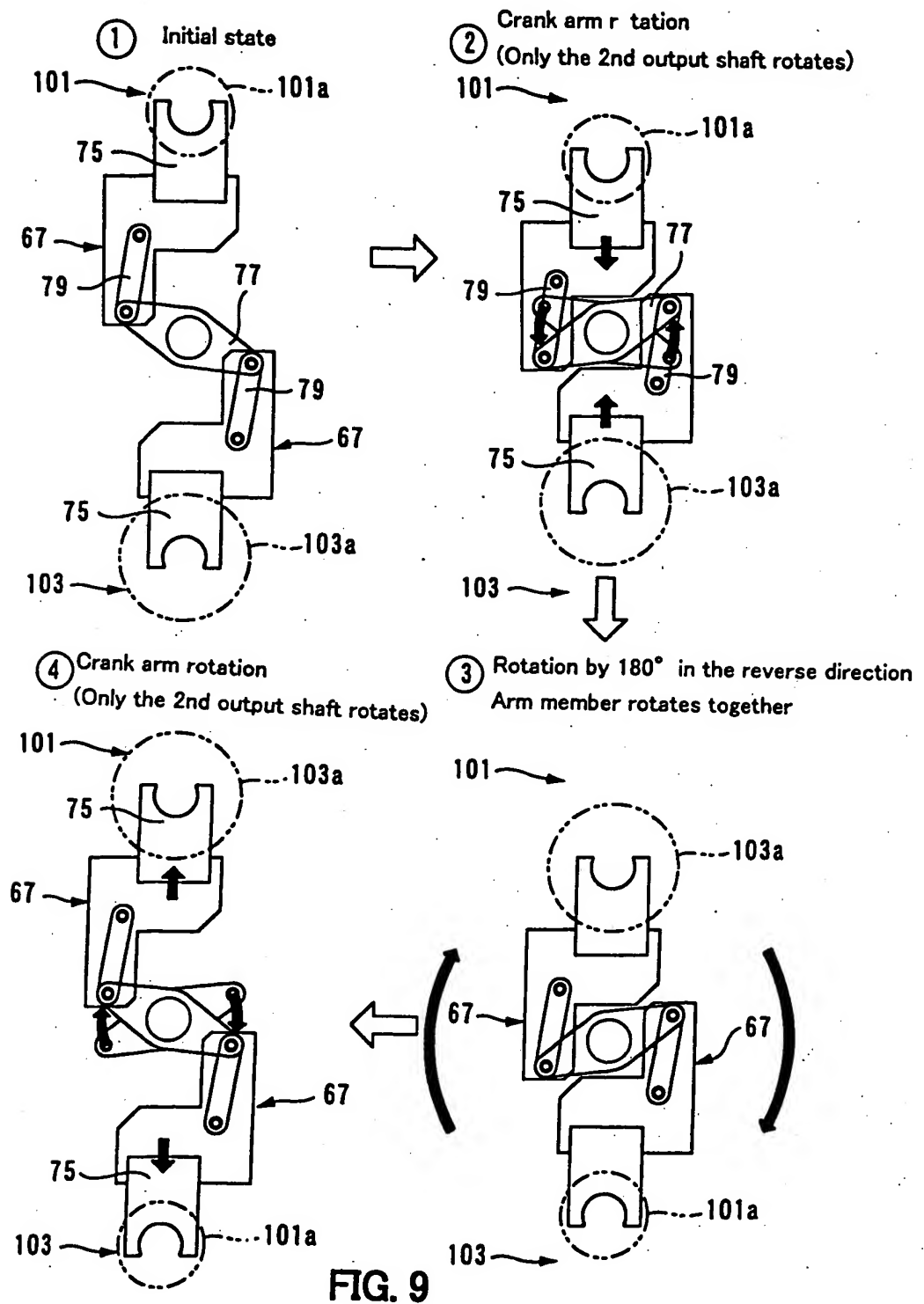


FIG. 7

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FIG. 10A The snatching member in the unfolded state

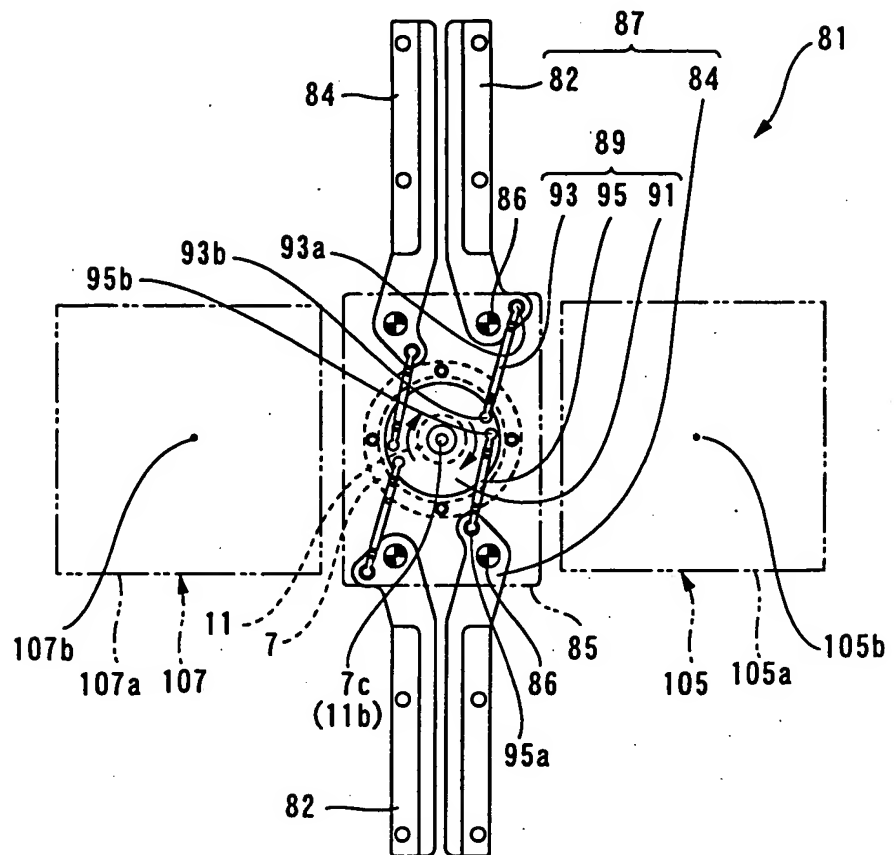
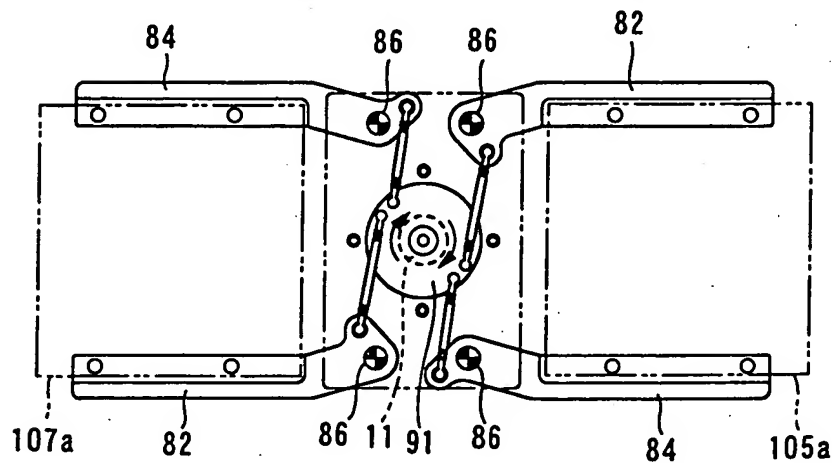
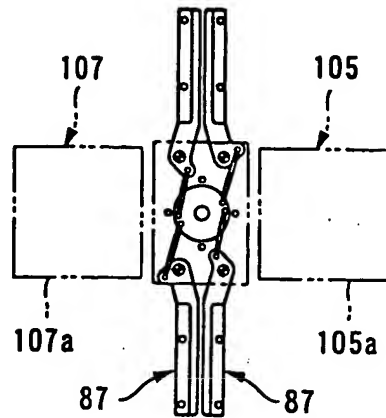


FIG. 10B The snatching member in the folded state

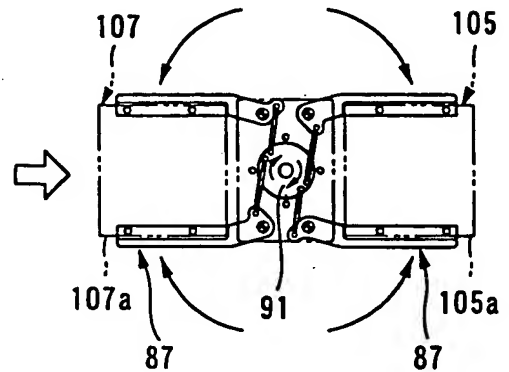


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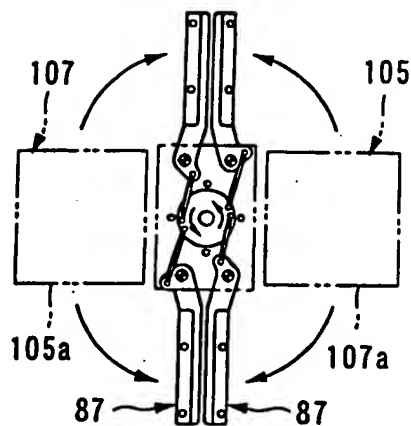
① Initial state



② The snatching arms fold, and catch the workpiece



④ The snatching arms unfold, and leave the workpiece free



③ The whole base member revolves by 180°

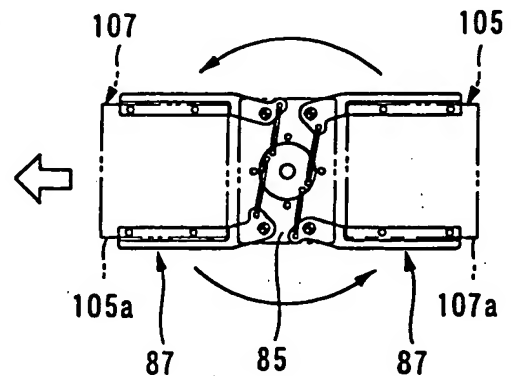


FIG. 11

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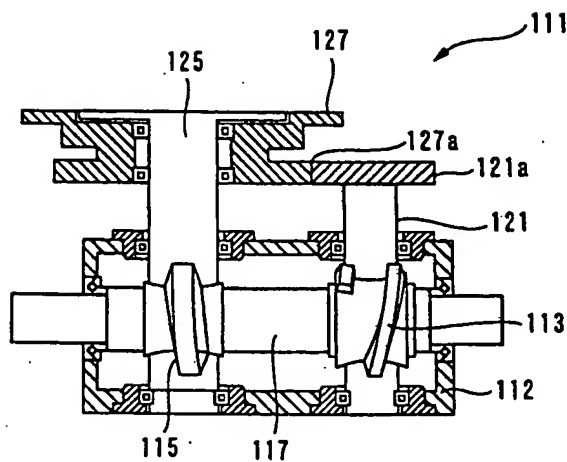


FIG. 12A
PRIOR ART

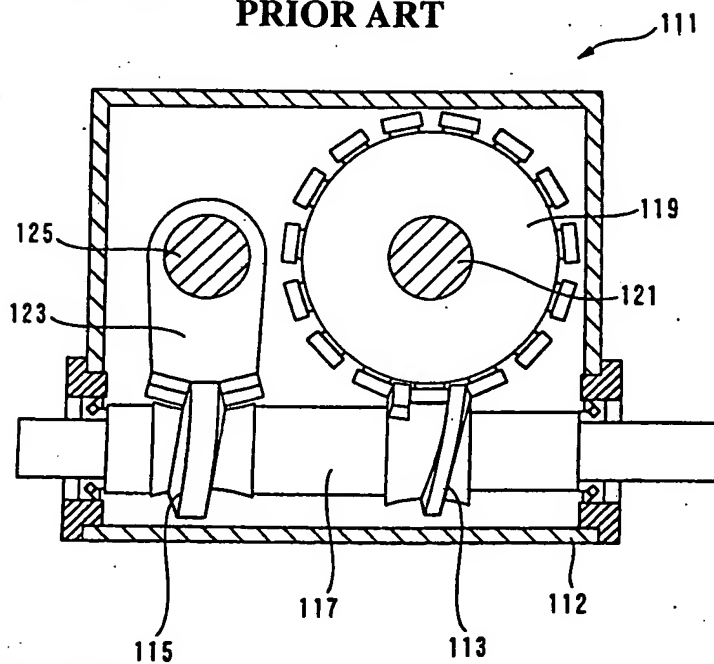


FIG. 12B
PRIOR ART